



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/454,755

12/06/1999

SACHIKO NISHIURA

4432-19

4202

7590

07/27/2004

LAFF WHITESEL CONTE & SARET  
401 NORTH MICHIGAN AVENUE  
CHICAGO, IL 60611

EXAMINER

YANG, RYAN R

ART UNIT

PAPER NUMBER

2672

19

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/454,755

Applicant(s)

NISHIURA, SACHIKO

Examiner

Ryan R Yang

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-11,13-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13-20 and 22-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed on 5/10/2004.

This action is final.

2. Claims 1-2, 4-11, 13-20 and 22-30 are pending in this application. Claims 1, 10, 19 and 28-30 are independent claims. In the Amendment, filed on 5/10/2004, claims 18 and 30 were amended, and claims 31-33 were cancelled.

3. This application claims foreign priority dated 12/9/1998.

4. The present title of the invention is "Apparatus and Method for Converting an Object Display Description Document" as filed originally.

***Claim Rejections - 35 USC § 102***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-2, 6-11, 15-18 and 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Vyncke et al. (5,926,185).

As per claim 10, Vyncke et al., hereinafter Vyncke, discloses a method for converting an original set of source objects by reducing the number of objects required to display a description document, said method comprising a generating means for generating a set of new objects, from said original set of source objects in the document, a number of new objects in said set of new objects being fewer than a number of objects in said original set of source objects, said fewer objects obtaining a display image equivalent to the display of an image obtained from said original set of

Art Unit: 2672

source objects ("Objects with multiple attributes like a fill and a stroke are represented as one object in most graphics art editors, but during PostScript export they get broken into multiple objects, one for the fill and one for the stroke. By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 22-27).

Wherein said generating step generates said new objects from a transparent or translucent source object and other source objects located at a layer lower than a layer including said transparent or translucent source object and spatially overlapping said transparent or translucent source object ("the objects in the sequence must be all opaque (solid) or all transparent", column 9, line 42-43),

wherein said generating step generates a new merged object including at least a first source object having an area and a second object having an area and superimposed on said first source object ("By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 25-27; certain objects hide other objects ... Fig. 8a shows an example of a rectangle 206 which completely covers a square 208 ... Although the circle completely covers a triangle 212, the circle is not opaque (solid), so the triangle is not actually hidden but shows through" (column 8, line 27-57), thus, the objects can have area).

7. As per claim 11, Vyncke demonstrated all the elements as applied in the rejection of independent claim 10, *supra*, and further discloses said generating step deletes source objects hidden spatially behind another source object which is not

transparent nor translucent ("To merge the two objects, the stroke is transferred to the back object and the top object is deleted", column 5, line 39-41).

8. As per claim 15, Vyncke demonstrated all the elements as applied in the rejection of independent claim 10, supra, and further discloses a step of storing said set of new objects to a storage medium (Figure 1 104).

9. As per claim 16, Vyncke demonstrated all the elements as applied in the rejection of independent claim 10, supra, and further discloses a step of selectively storing said set of source objects or said set of new objects to a storage medium (Figure 1 100).

10. As per claim 17, Vyncke demonstrated all the elements as applied in the rejection of independent claim 10, supra, and further discloses a step of displaying said set of new objects ("the output device may be a display screen", column 1, line 35).

11. As per claim 18, Vyncke demonstrated all the elements as applied in the rejection of independent claim 10, supra, and further discloses a step for selectively displaying said set of source objects or said set of new objects (Figure 7b is a selecting process).

12. As per independent claim 1, since it is directed to an apparatus for performing the method of independent claim 10, and therefore is similarly rejected as independent claim 10.

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Vyncke. It is further noted that both software and hardware means are functionally equivalent.

13. As per claim 2, Vyncke demonstrated all the elements as applied in the rejection of independent claim 1, supra, and further discloses said generating means deletes source objects hidden spatially behind another source object which is not transparent nor translucent ("To merge the two objects, the stroke is transferred to the back object and the top object is deleted", column 5, line 39-41).

14. As per claim 6, Vyncke demonstrated all the elements as applied in the rejection of independent claim 1, supra, and further discloses a means for storing said set of new objects to a storage medium (Figure 1 104).

15. As per claim 7, Vyncke demonstrated all the elements as applied in the rejection of independent claim 1, supra, and further discloses a means for selectively storing said set of source objects or said set of new objects to a storage medium (Figure 1 100).

16. As per claim 8, Vyncke demonstrated all the elements as applied in the rejection of independent claim 1, supra, and further discloses a means for displaying said set of new objects, wherein said apparatus is used as a browser ("the output device may be a display screen", column 1, line 35, and Figure 7B is a browsing process).

17. As per claim 9, Vyncke demonstrated all the elements as applied in the rejection of independent claim 1, supra, and further discloses a means for selectively displaying said set of source objects or said set of new objects, wherein said apparatus is used as a browser (Figure 7B is a browsing process).

18. As per claim 28, Vyncke discloses an apparatus for converting an original set of source objects by reducing the number of objects required to display a description document, said apparatus comprising a generating means for generating a set of new

Art Unit: 2672

objects, from said original set of source objects in the document, a number of new objects in said set of new objects being fewer than a number of objects in said original set of source objects, said fewer objects obtaining a display image equivalent to the display of an image obtained from said original set of source objects ("Objects with multiple attributes like a fill and a stroke are represented as one object in most graphics art editors, but during PostScript export they get broken into multiple objects, one for the fill and one for the stroke. By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 22-27).

Wherein said generating means generates said new objects from a transparent or translucent source object and other source objects not transparent nor translucent and located at a layer lower than a layer including said transparent or translucent source object and spatially overlapping said transparent or translucent source object (Figure 8a where 210 is a translucent circle and 212 a triangle- "Although the circle completely covers a triangle 212, the circle is not opaque (solid), so the triangle is not actually hidden but shows through" (column 8, line 27-57), so the new object contains both circle 210 and triangle 212),

wherein said generating means generates a new merged object including at least a first source object and a second object superimposed on said first source object ("By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 25-27; certain objects hide other objects ... Fig. 8a shows an example of a rectangle 206 which completely covers a square 208 ..." (column 8, line 27-57), thus, the objects can have area).

19. As per claim 29, Vyncke discloses an apparatus for converting an original set of source objects by reducing the number of objects required to display a description document, said apparatus comprising a generating means for generating a set of new objects, from said original set of source objects in the document, a number of new objects in said set of new objects being fewer than a number of objects in said original set of source objects, said fewer objects obtaining a display image equivalent to the display of an image obtained from said original set of source objects ("Objects with multiple attributes like a fill and a stroke are represented as one object in most graphics art editors, but during PostScript export they get broken into multiple objects, one for the fill and one for the stroke. By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 22-27).

Wherein said generating means generates said new objects from a transparent or translucent source object and other source objects not transparent nor translucent and located at a layer lower than a layer including said transparent or translucent source object and spatially overlapping said transparent or translucent source object (Figure 8a where 210 is a translucent circle and 212 a triangle- "Although the circle completely covers a triangle 212, the circle is not opaque (solid), so the triangle is not actually hidden but shows through" (column 8, line 27-57), so the new object contains both circle 210 and triangle 212),

wherein said generating means generates a new merged object including at least a first source object and a second object superimposed on said first source object ("By merging the two objects together to create a single object with multiple attributes, the



file is optimized", column 5, line 25-27; certain objects hide other objects ... Fig. 8a shows an example of a rectangle 206 which completely covers a square 208 ..."  
(column 8, line 27-57), thus, the objects can have area).

20. As per claim 30, Vyncke discloses a computer program for causing a computer to execute a method for converting an object display description document by reducing the number of objects required for the display, said method comprising a generating step of generating, from an original set of source objects in the document, a set of new objects which are fewer than a number of said objects forming said original set of source objects, in order to obtain a display image equivalent to the display image obtained from said original set of source objects ("Objects with multiple attributes like a fill and a stroke are represented as one object in most graphics art editors, but during PostScript export they get broken into multiple objects, one for the fill and one for the stroke. By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 22-27).

wherein said generation means generates new objects from a transparent or translucent source object and other source objects not transparent nor translucent and located at a layer lower than a layer including said transparent or translucent source object and spatially overlapping said transparent or translucent source object 1 (Figure 8a where 210 is a translucent circle and 212 a triangle- "Although the circle completely covers a triangle 212, the circle is not opaque (solid), so the triangle is not actually hidden but shows through" (column 8, line 27-57), so the new object contains both circle 210 and triangle 212),

wherein said generating means generates a new merged object including at least a first source object and a second object superimposed on said first source object ("By merging the two objects together to create a single object with multiple attributes, the file is optimized", column 5, line 25-27).

***Claim Rejections - 35 USC § 103***

21. Claims 19-20 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vyncke et al.

22. As per claims 19-20 and 24-27, these are directed to computer program performing the method of claims 10-11 and 15-18, respectively. Although Vyncke is silent to the limitation of a "computer program" performing the method of claims 10-11 and 15-18, however, since Vyncke's disclosure is useful in computer graphics processing, it is obvious that his method can be executed in the form of computer program in order to process graphical objects in a computer system. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Vyncke and make them into software program to run the process and, therefore, are similarly rejected as claims 10-11 and 15-18, respectively.

23. Claims 4, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vyncke et al. as applied to claim 1 above, and further in view of Cannon (5,559,950)

As per claim 13, Vyncke demonstrated all the elements as applied to the rejection of independent claim 10, supra.

Vyncke discloses a method of optimizing graphical objects. It is noted that Vyncke does not explicitly disclose "generation of said new object from said transparent or translucent source object and said other source objects is performed for a time range in which said transparent or translucent source object spatially overlaps said other source objects", however, this is known in the art as taught by Cannon. Cannon discloses an animated display system in which for a time range the transparent or translucent source object spatially overlaps the background object (Figure 5).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Cannon into Vyncke because Vyncke discloses a method of optimizing graphical objects and Cannon discloses a system to spatially overlap transparent animated objects to other objects in order to increase the animation speed.

24. As per claim 4, Vyncke demonstrated all the elements as applied to the rejection of independent claim 1, *supra*.

Vyncke discloses a generating means for optimizing graphical objects. It is noted that Vyncke does not explicitly disclose "generation of said new object from said transparent or translucent source object and said other source objects is performed for a time range in which said transparent or translucent source object spatially overlaps said other source objects", however, this is known in the art as taught by Cannon. Cannon discloses an animated display system in which for a time range the transparent or translucent source object spatially overlaps the background object (Figure 5).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Cannon into Vyncke because Vyncke discloses a generating means for of optimizing graphical objects and Cannon discloses a system to spatially overlap transparent animated objects to other objects in order to increase the animation speed.

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Vyncke. It is further noted that both software and hardware means are functionally equivalent.

25. As per claim 22, these are directed to computer program performing the method of claim 13. Since Vyncke's disclosure is useful in computer graphics processing, it is obvious that his method can be executed in the form of computer program in order to process graphical objects. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Vyncke and make them into software program to run the process and, therefore, is similarly rejected as claim 13.

26. Claims 5, 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vyncke et al. as applied to claim 1 above, and further in view of Capps et al. (5,583,542).

As per claim 14, Vyncke demonstrated all the elements as applied to the rejection of independent claim 10, supra.

Vyncke discloses a method of optimizing graphical objects. It is noted that Vyncke does not explicitly disclose "generating means deletes a source object when a

Art Unit: 2672

display time for said source object is out of a display time range for said set of source objects", however, this is known in the art as taught by Capps et al., hereinafter Capps. Capps discloses an object deleting method in which "the object O could be deleted after the animation sequence", column 17, line 26.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Capps into Vyncke because Vyncke discloses a method of optimizing graphical objects and Capps discloses the displayed objects can be deleted after certain time range in order to simplify the process.

27. As per claim 5, Vyncke demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Vyncke discloses a generating means for optimizing graphical objects. It is noted that Vyncke does not explicitly disclose "generating means deletes a source object when a display time for said source object is out of a display time range for said set of source objects", however, this is known in the art as taught by Capps et al., hereinafter Capps. Capps discloses an object deleting method in which "the object O could be deleted after the animation sequence", column 17, line 26.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Capps into Vyncke because Vyncke discloses a generating means for optimizing graphical objects and Capps discloses the displayed objects can be deleted after certain time range in order to simplify the process.

28. As per claim 23, As per claim 22, these are directed to computer program performing the method of claim 14. Since Vyncke and Cannon's disclosure are useful in computer graphics processing, it is obvious that his method can be executed in the form of computer program in order to process graphical objects. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Vyncke and Cannon, and make them into software program in order to run the process and, therefore, is similarly rejected as claim 13.

### ***Response to Arguments***

29. Applicant's arguments filed 5/10/2004 have been fully considered but they are not persuasive.

As per claims 1, 10 and 19, applicant alleges that Vyncke et al. in Figure 8a merely show the square 208 hidden behind square 206. In reply, examiner notes Fig. 8a also shows a triangle 212 which is completely covered by a circle 206. The circle 206 is not opaque (column 8, line 38), thus, the combined image shows both circle 206 and triangle 212).

As per claims 28-30, applicant alleges that Vyncke does not meet the limitation "wherein said generating means generates said new objects from a transparent or translucent source object and other source objects not transparent nor translucent and located at a layer lower than a layer including said transparent or translucent source object and spatially overlapping said transparent or translucent source object. In reply, examiner consider the limitation is met by Figure 8a where 210 is a translucent circle and 212 a triangle- "Although the circle completely covers a triangle 212, the circle is

Art Unit: 2672

not opaque (solid), so the triangle is not actually hidden but shows through" (column 8, line 35-48)).

***Conclusion***

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ryan Yang** whose telephone number is (703) 308-6133.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

Art Unit: 2672

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-47000377.

Ryan Yang

July 20, 2004

A handwritten signature in black ink, appearing to read 'M. Razavi', with a large, stylized flourish at the end.

**MICHAEL RAZAVI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**